

Remarks/Arguments:

Reconsideration of the application is requested.

Claims 1-5, 8-16, 20-23 and 25 remain in the application.

Claims 1 and 25 have been amended. Claim 17 has been cancelled.

In item 7 on page 4 of the Office action, claims 1-17, 20-23, and 25 have been rejected as being obvious over Iwasawa (JP 63-037626) in view of Kato (U.S. Patent No. 5,161,936) under 35 U.S.C. § 103.

The rejection has been noted and the claims have been amended in an effort to even more clearly define the invention of the instant application. The claims are patentable for the reasons set forth below. Support for the changes is found in claim 17, on page 6, lines 8-10, and page 13, lines 9-14 of the specification.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claims 1 and 25 call for, *inter alia*:

the portal crane installation being configured to extend across the entire clean room and including two parallel crane tracks disposed in an opposing fashion in vicinity of the longitudinal inner walls.

It is an object of the present invention to provide a transportation system, which is used to supply arbitrarily disposed fabrication units within a clean room with wafers or other semiconductor products (page 5, line 4-19). According to claims 1 and 25 the installation includes two parallel crane tracks mounted at the edge of the clean room. A carrier is movably mounted on the crane tracks so that a transport container supplies all locations in the clean room. Therefore, the fabrication units can be arbitrarily disposed in the clean room. On page 3, lines 14-18 of the instant application, it is disclosed that semiconductor factories often face the problem that a necessary modification or expansion of the equipment installed requires great expense. This is due to the fact that in installations disclosed in the prior art, fabrication units are generally installed along a conveyor system, which requires that the fabrication units be installed in a linear fashion. The present invention uses an overhead and surface-wide transportation system instead. Such a system overcomes the above-noted constraints, as it is no longer necessary to install the fabrication units beside each

other in a predefined order according to process steps (page 6, lines 4-10).

The Iwasawa reference discloses a robot system capable of transferring a wafer cassette in an x-z plane between several fabrication units. In Figs. 1-4, Iwasawa teaches that production units are disposed in a linear fashion. The production units of Iwasawa cannot be arbitrarily disposed in the clean room. Furthermore, modifications or expansions to the installation of Iwasawa are difficult.

Iwasawa teaches that a single rail robot (M) is sufficient to provide materials to the production units. Consequently, the linear guides (14) are disposed close to the center of the clean room, so that the production units do not obstruct the path of the robot (M). Moreover, it is an object of Iwasawa to provide a robot system which prevents dust from being generated during the movement of an overhead mobile robot along a linear guide by placing the linear guide in a vicinity of an air supply and exhaust section.

The Kato reference discloses a crane installation having two parallel rails (3a and 3b) mounted on pillars (2a and 2b) along with traversing rails (37 and 38), which support robots (4 and 5). The Kato reference does not disclose a rail guide,

bogie, holding device, nor a transport container.

Furthermore, the Kato reference does not provide disclosure to provide the crane installation in a semiconductor factory.

It is a requirement for a *prima facie* case of obviousness, that the prior art references must teach or suggest all the claim limitations.

The references do not show or suggest the portal crane installation being configured to extend across the entire clean room and including two parallel crane tracks disposed in an opposing fashion in vicinity of the longitudinal inner walls, as recited in claims 1 and 25 of the instant application.

The references applied by the Examiner do not teach or suggest all the claim limitations. Therefore, it is believed that the Examiner has not produced a *prima facie* case of obviousness.

Furthermore, it is applicants' position that a person of ordinary skill in the art would not combine the teachings of Iwasawa and Kato, for the reasons set forth hereinafter.

A person of ordinary skill in the art has no motivation to combine the teachings of Iwasawa and Kato, because including

the traversing rails (37 and 38) of Kato would provide no benefit to Iwasawa. The robot (M) of Iwasawa would still be restricted to the space between the linearly disposed production units. Therefore, in order to arrive at the instant invention as claimed, further modifications to the installation disclosed in Iwasawa are required.

Furthermore, the main function of the Iwasawa reference is to provide a dust-free movement of the robot by using a linear guide along with a dust collector. To rearrange the linear guides such that the robot system of Iwasawa would span the entire clean room is in contradiction to the teachings of Iwasawa. This is the case because such a modification would give rise to a non dust free movement of the robot as the movement of the robot would no longer be in a vicinity of the dust collector and the air supply and exhaust sections. Since the modification of Iwasawa as suggested by the Examiner would destroy its intended function, there is no motivation to combine the references.

It is well settled that almost all claimed inventions are but novel combinations of old features. The courts have held in this context, however, that when "it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or

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motivation in the prior art to make the selection made by the applicant". Interconnect Planning Corp. v. Feil, 227 USPQ 543, 551 (Fed. Cir. 1985) (emphasis added). "Obviousness can not be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination". In re Bond, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). "Under Section 103 teachings of references can be combined **only** if there is some suggestion or incentive to do so." ACS Hospital Systems, Inc. v. Montefiore Hospital et al., 221 USPQ 929, 933, 732 F.2d 1572 (Fed. Cir. 1984) (emphasis original). "Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be 'clear and particular.'" Winner Int'l Royalty Corp. v. Wang, 53 USPQ2d 1580, 1587, 202 F.3d 1340 (Fed. Cir. 2000) (emphasis added; citations omitted); Brown & Williamson Tobacco Corp. v. Philip Morris, Inc., 56 USPQ2d 1456, 1459 (Fed. Cir. Oct. 17, 2000). Applicants believe that there is no "clear and particular" teaching or suggestion in Iwasawa to incorporate the features of Kato, and there is no teaching or suggestion in Kato to incorporate the features of Iwasawa.

In establishing a *prima facie* case of obviousness, it is incumbent upon the Examiner to provide a reason why one of

ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion, or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the applicant's disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir. 1988), cert. den., 488 U.S. 825 (1988). The Examiner has not provided the requisite reason why one of ordinary skill in the art would have been led to modify Iwasawa or Kato or to combine Iwasawa's and Kato's teachings to arrive at the claimed present invention. Further, the Examiner has not shown the requisite motivation from some teaching, suggestion, or inference in Iwasawa or Kato or from knowledge available to those skilled in the art.

Applicants respectfully believe that any teaching, suggestion, or incentive possibly derived from the prior art is only present with hindsight judgment in view of the instant application. "It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. . . . The references

themselves must provide some teaching whereby the applicant's combination would have been obvious." In re Gorman, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (emphasis added). Here, no such teaching is present in the cited references.

Since claim 1 is believed to be allowable, dependent claims 2-5, 8-16, and 20-23 are believed to be allowable as well.

None of the other references applied against the claims do not make up for the deficiencies of Iwasawa and Kato.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1 or 25. Claims 1 and 25 are, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-5, 8-16, 20-23 and 25 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel respectfully requests a telephone call so that, if possible, patentable language can be worked out.

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Please charge any other fees which might be due with respect
to Sections 1.16 and 1.17 to the Deposit Account of Lerner &
Greenberg P.A., No. 12-1099.

Respectfully submitted,



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